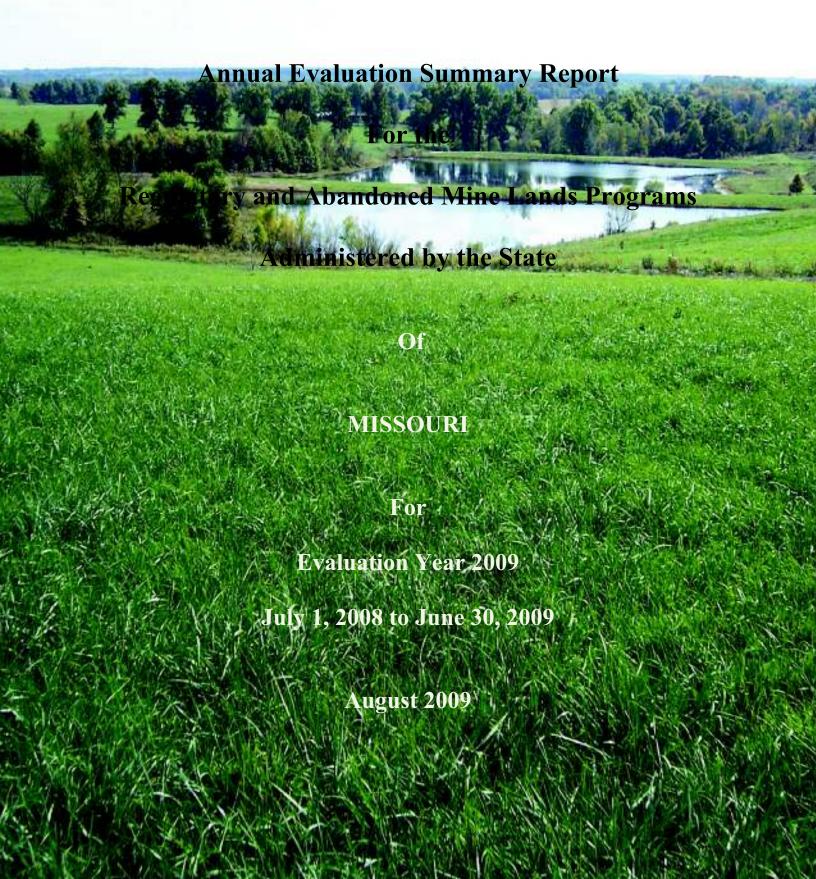
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT



EXECUTIVE SUMMARY

During the 2009 Evaluation Year, the Office of Surface Mining Reclamation and Enforcement, Alton Field Division conducted oversight evaluations of the Missouri Department of Natural Resources, Land Reclamation Program Regulatory and Abandoned Mine Land Programs. The oversight studies focused on the success of the Missouri Land Reclamation Program in meeting the Surface Mining Control and Reclamation Act of 1977 goals for environmental protection and prompt, effective reclamation of land mined for coal. A Partnership Plan in the form of a Performance Agreement was cooperatively developed by the Alton Field Division and the Missouri Land Reclamation Program to tailor the oversight activities to the unique conditions of the State program. The purpose of the oversight activities was to identify the need for financial, technical, and other program assistance to strengthen the State program. Evaluation Year 2009 marks the third full evaluation year since the Missouri Land Reclamation Program resumed full primacy on February 1, 2006.

In support of the Office of Surface Mining Reclamation and Enforcement's national initiatives, the following studies were included in the Evaluation Year 2009 Performance Agreement:

OFF-SITE IMPACTS – Data on off-site impacts were collected during Federal and State inspections. No off-site impacts were identified at the 12 active units in Missouri. One off-site impact that was identified prior to Evaluation Year 2009 remained at a bond forfeiture site. Over 95 percent of the 21 Inspectable Units that composed Missouri's Inspectable Units list at the end of the evaluation year were free from off-site impacts in Evaluation Year 2009. Off-site impacts are being eliminated as bond forfeiture reclamation is completed.

RECLAMATION SUCCESS - During Evaluation Year 2009, the Missouri Land Reclamation Program released phase I bond on 106.0 acres, phase II bond on 153.4 acres, and phase III bond on 263.2 acres. Based on field observations and review of documentation contained in bond release request files, the Office of Surface Mining Reclamation and Enforcement determined that all the bond release applicants met the performance standards for each phase of bond being requested for release, and the State appropriately released the bonds as requested. No new acres were bonded in Missouri during the evaluation period.

CUSTOMER SERVICE: CITIZEN COMPLAINTS – Review of the State's citizen complaint files revealed the Missouri Land Reclamation Program has not received any citizen's complaints since February 1, 2006, when the State reassumed full Regulatory Title V primacy; therefore, the Alton Field Division could not complete this topical study.

General oversight topic reviews were conducted for both the State Regulatory and Abandoned Mine Land Programs. The following reports were completed:

BOND FORFEITURE RECLAMATION – The Office of Surface Mining Reclamation and Enforcement has been concerned about the backlog of reclamation that needs to be

accomplished at bond forfeiture sites in Missouri. During Evaluation Year 2009, the Missouri Land Reclamation Commission released forfeiture reclamation liability on three permanent program permits covering 272.0 acres and also released reclamation liability on three interim program permits covering 220.0 acres. The Office of Surface Mining Reclamation and Enforcement determined that the Missouri Land Reclamation Program continued to aggressively pursue completion of bond forfeiture reclamation in Evaluation Year 2009.

ABANDONED MINE LAND INVENTORY SYSTEM CERTIFICATION AND DATA ACCURACY – The Office of Surface Mining Reclamation and Enforcement verified that Missouri's certified procedures are being appropriately implemented, and data accuracy is being maintained in accordance with the Office of Surface Mining Reclamation and Enforcement's policy and procedures as outlined by the Office of Surface Mining Reclamation and Enforcement's Directive AML-1.

MISSOURI ABANDONED MINE LAND PRE-CONSTRUCTION PROJECT INSPECTIONS – The Office of Surface Mining Reclamation and Enforcement concluded that Missouri's Abandoned Mine Land Program is in compliance with its approved Reclamation Plan, the Surface Mining Control and Reclamation Act, and the Office of Surface Mining Reclamation and Enforcement's Abandoned Mine Land directives and guidelines.

MISSOURI ABANDONED MINE LAND PROGRAM ADMINISTRATION OF REALTY POLICIES AND PROCEDURES – The Office of Surface Mining Reclamation and Enforcement concluded that Missouri's realty actions are in compliance with its approved Reclamation Plan.

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Cover page is a photo of reclaimed land at Associated Electric Cooperative, Inc. – Prairie Hill Mine

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for the State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Missouri Program and the effectiveness of the Missouri Land Reclamation Program (MLRP) in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of July 1, 2008 to June 30, 2009. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Mid Continent Region (MCR) Office in Alton, Illinois.

The following list of acronyms is used in this report:

AFD – Alton Field Division

AML – Abandoned Mine Land

AMLIS - Abandoned Mine Land Inventory System

BTU - British Thermal Unit

EY – Evaluation Year

IMCC – Interstate Mining Compact Commission

IU – Inspectable Unit

MCR – Mid Continent Region

MLRP - Missouri Land Reclamation Program

MLRC - Missouri Land Reclamation Commission

OSM – Office of Surface Mining Reclamation and Enforcement

PA – Performance Agreement

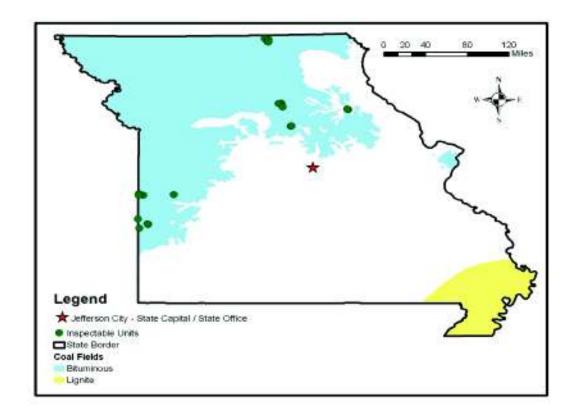
SMCRA – Surface Mining Control and Reclamation Act

II. Overview of the Missouri Coal Mining Industry

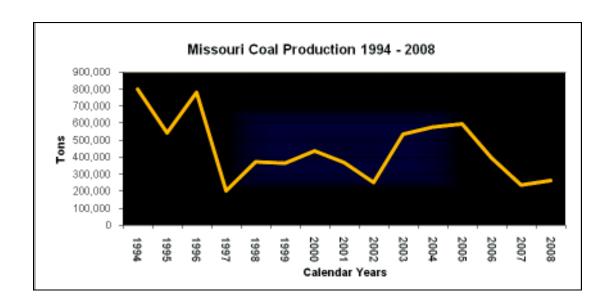
Coal deposits were first mined in Missouri in the late 1840's, giving the state the distinction of being the first state west of the Mississippi River to produce coal for commercial use. Although most of the early coal mines in the state were underground, surface mining began in the mid 1930's, and has accounted for virtually all the coal produced in Missouri since the 1960's. Approximately 67,000 acres were affected by coal mining in 48 Missouri counties before enactment of the SMCRA in 1977.

Missouri's coal ranges from lignite to high volatile A bituminous. Its coal reserve is estimated to be six billion tons, accounting for between one and two percent of the coal reserves in the United States. The coal-bearing areas cover about 23,000 square miles, or 33 percent of the State. Twelve of the 20 identified coal seams have been actively mined. The coal has a high heat value, averaging twenty-two million British Thermal Units (BTU) per short ton. The Sulphur content of 95 percent of Missouri's reserves is relatively high, greater than 2.5 pounds of Sulphur per million BTU and averaging four percent by weight. Economics generally limit production to coal seams greater than 28

inches thick. Coal production is currently confined to the southwest portion of the State in Bates County. Missouri supplies coal to the mid-western market for blending with western coal. The current primary use of the coal is for power generation.



Coal production in Missouri has declined since reaching peak production of nearly seven million tons per year in 1984. A sharp decline to 627,774 tons occurred in 1993, down from the 1992 production level of 2,908,012 tons, after the state's largest operator ceased production in early 1993. Annual production has fluctuated during the last decade: however, production remained relatively steady during the period 2003-2005 when the two currently active mines produced an average of about 569,000 tons per year. Production dropped to 394,099 tons in calendar year 2006 and continued to decline in 2007 when only 236,108 tons were produced. A slight increase in production occurred in calendar year 2008 when 262,025 tons were mined.



III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

Missouri and OSM consider the bi-monthly Missouri Land Reclamation Commission (MLRC) public meetings the principal forum for participation from industry, landowners, citizen groups, and other interested parties. Whenever the opportunity arises, MLRP personnel attend and set up displays explaining MLRP's responsibilities and accomplishments at public gatherings and conferences. Press releases are completed for larger abandoned mine land projects. When ongoing abandoned mine land reclamation projects attract local news coverage, MLRP personnel take the opportunity to explain the activities and importance of the State's Abandoned Mine Land (AML) Program by participating in press interviews.

Missouri maintains internal systems to track AML contract obligations and expenditures, public inquiries and project ranking data. Every year, hundreds of contacts are made with the public, other state and federal agencies, industry officials, and landowners of abandoned mine lands.

The MLRP also provides landowners and the public in general the full extent of public participation in its permitting and bond release processes as provided by the state regulations.

IV. Major Accomplishments/Issues/Innovations in the Missouri Program

Abandoned Mine Land Program

OSM awarded Missouri's Title IV AML grant for fiscal year 2006 in the amount of \$1,550,000, fiscal year 2007 grant in the amount of \$1,550,000, fiscal year 2008 grant in the amount of \$1,830,731, and the fiscal year 2009 AML grant in the amount of

\$2,225,311. During Evaluation Year (EY) 2009, the MLRP accomplished the following:

• The Billy Creek/ Blacksmith AML Reclamation Project was completed on November 4, 2008 at a cost of \$306,102.33. The Billy Creek/ Blacksmith Project entailed the reclamation of two small gob piles associated with abandoned underground mines, located approximately six miles west of the city of Kirksville, in northeast Missouri. The gob piles were graded to eliminate dangerous piles and embankments, mitigate acid mine drainage and polluted water agricultural/industrial, remove industrial/ residential waste, and address several hazardous equipment and facility features. Approximately nine acres of barren and eroding coal waste were graded, treated with lime, and covered with glacial till borrow material and revegetated to control erosion.



Blacksmith gob under construction

- The Aurora Shafts Reclamation Project was completed on August 26, 2008. This project closed five (5) dangerous vertical mine shafts, three of which were located in the Aurora city park in southwest Missouri. The mine openings were dewatered, excavated, and sealed with a 4-foot concrete plug. The total cost of reclamation was \$70,448.20.
- On June 16, 2008, the MLRP was contacted by U.S. Senator Claire McCaskill's office regarding a collapsed hole that suddenly developed in the driveway of a Granby, Missouri residence in Newton County, located in the southwest corner of the state. An investigation revealed an abandoned lead/zinc air shaft. The area in and around Granby was underground mined in the 1800's to early 1900's. This priority 1, non-coal vertical opening was closed in EY 2009 at a cost of \$1,600.00.
- The Edwards Shaft Reclamation Project, located in west central Missouri near the town of Corder in Lafayette County, was completed on September 13, 2008. Reclamation entailed closing the entry of a priority 2 underground coal mine portal. The work included excavation and removal of the old timbers and fractured cap rock. The shaft opening was exposed and rock and soil fill was

- pushed into the opening, thus barring access to the shaft. The work was completed at a total cost of \$2,568.00.
- The Stroup Shaft Reclamation Project was completed on Monday December 29, 2008. This project corrected a lead/zinc shaft subsidence feature located near the southwest corner of the state within a storage facility in Joplin, Missouri. The hole was conically shaped with dimensions approximately eight to10 feet deep and 14 to 16 feet in diameter. Taking into consideration the location and size of the hole, it was decided that the best course of action was to fill the subsidence hole with concrete. The total cost of reclamation was \$4,570.00.
- The West Fountain Shafts Reclamation Project, located in Joplin, Missouri, was completed on April 7, 2009. This project closed six (6) dangerous vertical mine shafts on private property located northwest of Joplin in Jasper County. All of the mine openings were excavated to expose bedrock and a four foot thick concrete plug was constructed over each shaft. The work was successfully completed at a total cost of \$50,100.
- On June 12, 2008, a professional services contract was awarded to Gredell Engineering Resources, Inc., of Jefferson City, MO, in an amount not to exceed \$167,470.00 for completing design of the Harrisburg-Thornhill Reclamation Project located in central Missouri. The scope of this contract includes completing design and engineering services, preparation of construction plans and specifications, and construction administration and inspection of the project. This project will consider the design and reclamation of approximately 115 acres associated with six areas of abandoned mine lands located near Harrisburg, Missouri. The scope of work for this project includes excavating and burying coal waste, grading and recontouring the site to eliminate dangerous spoil piles and embankments, eliminating acid pit impoundments, mitigating acid mine seeps, and revegetating the site to reduce erosion. The estimated cost of construction is \$1.2 million.
- Preliminary investigation of the West Ken Coal Reclamation Project (Jasper County southwest Missouri) has resulted in significant issues regarding the superfund. The AML staff continues to coordinate with the Missouri Department of Natural Resources Hazardous Waste Program, United States Environmental Protection Agency, Region 7 Superfund Division, and the Doe Run Company to resolve the outstanding liability concerns and move this project into a preliminary design phase in the future.
- On June 18, 2009, a construction contract in the amount of \$735,615.00 was awarded for completion of the West Montrose Reclamation Project in Henry County, Missouri. This project will reclaim approximately 70 acres of barren and eroding mine spoils located in the Germantown area, approximately two miles west of the town of Montrose in southwest Missouri. Reclamation of this site will include elimination of a hazardous pit and highwall located along a county gravel

road, grading and recontouring dangerous piles and embankments, eliminating acid water impoundments, and revegetating the barren spoils to control erosion.

• The AML staff has completed the initial site investigations and preliminary design of the Highland Highwall Reclamation Project, located in southwest Missouri near Calhoun in Henry County. Following seven months of correspondence, the U.S. Army Corps of Engineers has determined that there are no jurisdictional waters within the project area. Staff will now proceed with the planning and detailed design of the project. Work at this site will address approximately 70 acres of pre-law coal mine land where reclamation was left incomplete by the mining company. Reclamation will eliminate an extremely dangerous highwall that is located immediately adjacent to a county gravel road. Additionally, dangerous piles and embankments will be graded and revegetated to control erosion.

Since the program was first fully approved in 1982, Missouri has reclaimed 73,702 feet of dangerous highwalls, 36 portals, 203 vertical mine openings, approximately 6.0 acres of subsidence, 54 instances of polluted water, 1,603 acres that were contributing to 10.8 miles of clogged streams, 668 acres of dangerous piles and embankments, 217 acres of coal waste, and 1,390 acres of mine spoils.

Regulatory Program

The MLRP processed and approved bond release requests for the active coal mining industry during the evaluation year. This amounted to full phase III bond release on 263.2 covered by four permanent program permits and resulted in removal of two of these permits from the State's inspection responsibilities.

Missouri is continuing to address the outstanding program amendments to its existing State regulations. The amendments are proceeding through the State's system of rule promulgation that requires many individual steps in order to finally codify them into state regulation. The entire process usually takes no less than 18 months. With this in mind, the State expects to codify the amendments during late 2009.

Another accomplishment for the State during this evaluation year was the amount of bond forfeiture reclamation completed. Although hampered by extremely wet weather the last two years, the state achieved release on 272.0 acres covered by three permanent program permits and, in addition, achieved release on 220.0 acres of interim law lands covered by interim program permits. In order to put the bond forfeiture release effort into perspective, Missouri was responsible for completing reclamation on and achieving release for almost 7,000 acres of coal mined lands on July 1, 2005. During the past four evaluation years, Missouri has achieved release on almost 5,000 of these acres, therefore; the state has addressed and completed work on approximately 70 percent of the land for which it was responsible during this time period. Missouri intends to continue its aggressive approach to the issue of bond forfeited lands and to continue returning these lands to private ownership during the coming evaluation year.

At the beginning of this evaluation year Missouri contained two separate coal mining companies operating at two separate surface mining operations located in the west central part of the state along the Kansas border. In the fall of 2008, one of the companies, Continental Coal, Inc., successfully purchased the other coal company, Oswego Coal, Inc. The MLRP worked with both Continental Coal and Oswego Coal to process a permit transfer of the Oswego Coal mine to Continental Coal. This process was finalized in the spring of 2009 with all regulatory requirements for a permit transfer completed. At the end of this evaluation year, there now exists one remaining coal producing company in the state which currently operates both of the active surface mines. The total annual production from both mines is now expected to be approximately 600,000 tons.



A view of coal being loaded onto a haulage truck at the Former Oswego Coal mine in Bates county. This mine is now owned by Continental Coal, Inc.



A view of coal being mined at the Cottonwood Creek mine owned and operated by Continental Coal also in Bates county.

In January of 2009, the MLRP experienced the loss of its Staff Director. This was due to a change in the state's administration with the inauguration of a new governor who dismissed the MLRP's Staff Director. As of the end of EY 2009, a new director had yet to be selected by the Missouri Department of Natural Resources. The selection process is ongoing and a replacement is expected to be announced early in EY 2010.

Missouri operators have received the following national reclamation awards:

| Year of | Awarded | Company | Mine |
|---------|---------|---------------------------------------|---------|
| Award | by | | |
| EY 2007 | IMCC* | Associated Electric Cooperative, Inc. | BeeVeer |
| EY 2008 | OSM | Associated Electric Cooperative, Inc. | BeeVeer |

^{*}Interstate Compact Mining Commission

V. Success in Achieving the Purposes of SMCRA as Determined by Measuring and Reporting End Results

To further the concept of reporting end results under Title V of SMCRA, the findings from performance standard and public participation evaluations are being collected for a national perspective in terms of the number and extent of observed off-site impacts,

the number and percentage of inspectable units (IU) free of off-site impacts, the number of acres that have been mined and reclaimed and which meet the bond release requirements and have been released for the various phases of reclamation, and the effectiveness of customer service provided by the State.

The overall measure of excellence in the AML Program is the degree to which States are successful in achieving reclamation goals. One of the primary goals of AML topical reviews, referred to as Enhancement and Performance Reviews, is to improve upon this success. These reviews document each State's ability to achieve desired outcomes. Emphasizing outcomes allows OSM to justify when the end result is not being achieved and establish a basis for reaching agreement with (and providing assistance to) a State to improve its program.

Individual topic reports that provide additional details on how the following evaluations and measurements were conducted are available at the MCR office in Alton, Illinois.

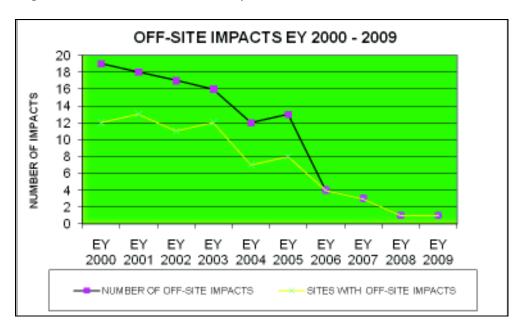
A. Off-Site Impacts

Pursuant to Directive REG-8, revised December 21, 2006, OSM annually evaluates and reports on the effectiveness of the MLRP's Regulatory Program in protecting the environment and the public from off-site impacts resulting from coal mining activities and reclamation operations. Off-site impact data are a measurement of the State's onthe-ground success in preventing or minimizing off-site impacts. The goal, however, is for each IU to have no off-site impacts.

An off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on resources (people, land, water, structures). The applicable State program must regulate or control the mining or reclamation activity or result of the activity causing an off-site impact. In addition, the impact on the resource must be substantiated as being related to a mining and reclamation activity and must be outside the area authorized by the permit for conducting mining and reclamation activities.

To determine the number of off-site impacts in the state, OSM conducted a total of nine oversight inspections in Missouri and reviewed State inspection and enforcement files to identify any off-site impacts observed by the MLRP. OSM did not observe any off-site impacts through its oversight inspections during EY 2009; however, a State inspection report did note that an off-site impact observed prior to EY 2009 remained at a bond forfeiture site. The off-site impact was characterized as hydrologic with a moderate effect on water resources. As a result, one off-site impact was identified at one of the 21 IUs, including nine bond forfeiture and 12 active units, which composed Missouri's IU list at the end of the evaluation year. As shown in Table 4, all 12 active units in Missouri were free of off-site impacts during the evaluation period. The active units group includes active units, surety reclamation units, and three units where bond has been forfeited but not collected.

In EY 2008, one off-site impact was observed at a forfeiture site included on Missouri's 22 unit IU list. Over 95 percent of Missouri's IUs have been free of off-site impacts for the last two evaluation years.



The objective of this measurement is that the MLRP and OSM direct efforts to decrease the occurrence of off-site impacts. Both the State and OSM are working to achieve this objective, and it is addressed in OSM's Performance Agreement (PA) with the State. Timely forfeiture reclamation will eliminate the off-site impact identified in EY 2009 and prevent new impacts from occurring.

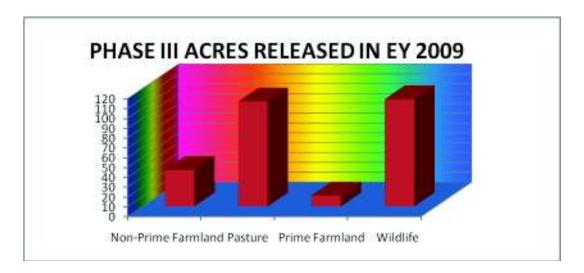
B. Reclamation Success

The MLRP released phase I bond on 106.0 acres, phase II bond on 153.4 acres and phase III bond on 263.2 acres during EY 2009. Acreage figures for the post-mining land uses of the land released were as follows: 108.8 acres of wildlife habitat, 106.5 acres of pasture, 36.9 acres of non-prime cropland, and 11.0 acres of prime farmland cropland. These releases accounted for removal of two permanent program permits from Missouri's IU list. Additional acreage was not bonded in EY 2009.

OSM conducted two joint bond release inspections at units where bond was released in EY 2009. Based on field observations and review of documentation contained in bond release request files, OSM determined that the bond release applicants met the performance standards for each phase of bond being requested for release, and the State appropriately released the bonds as requested.

At the end of EY 2009, 4,247.0 acres remained under phase III bond in Missouri. The sum of acres that was between phase I bond release and phase II bond release at the

end of the evaluation year was 703.0 and the sum of acres that was between phase II bond release and phase III bond release was 83.2. These figures are reflected in Table 5 of this report.



There was no re-mining activity in Missouri in EY 2009. Also, none of the mine sites in Missouri have impoundments that qualify as Mine Safety and Health Administration impoundments.

C. Customer Service- Citizen Complaints

The purpose of this evaluation was to determine the effectiveness of the State program in providing customer service to the public during citizen complaint investigations. Review of the State's citizen complaint files revealed that the MLRP has not received any citizen complaints since February 1, 2006, when the State reassumed full Regulatory Title V primacy. The Alton Field Division (AFD) will include a provision in the EY 2010 PA with Missouri to conduct this evaluation when the MLRP receives a complaint and conducts a citizen's complaint investigation.

VI. OSM Assistance

OSM provides technical assistance and technology support to State AML and Regulatory Programs at the individual State level on project specific efforts, and at the national level in the form of national meetings, forums and national initiatives. The MCR's Program Support Division provides direct technical assistance in project and problem investigation, design and analysis, permitting assistance, developing technical guidelines and training and support. The MCR works with the national Technical Innovation and Professional Services Program to deliver state-of-the-art computer hardware, software, training and systems support for Missouri's AML and Regulatory Programs. MCR also works on the development of regional and national forums, meetings and initiatives to ensure that interests and needs of individual States are

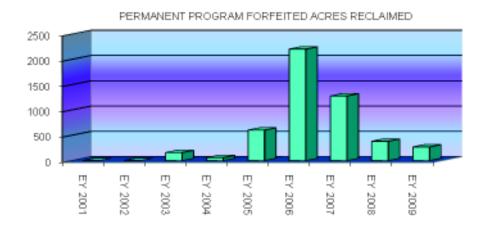
considered and included in these events. MCR initiated a regional Technology Transfer Team in 2004 on which each State, including Missouri, has a representative.

VII. General Oversight Topic Reviews

The following oversight topics were reviewed during EY 2009. The detailed finding reports are available at the MCR office in Alton, Illinois.

A. Bond Forfeiture Reclamation

(This topic is included in the EY 2009 Reclamation Success Report) OSM has been concerned about the backlog of reclamation that needs to be accomplished at bond forfeiture sites in Missouri. In order to address this situation the MLRP established a Coal Bond Forfeiture Release Schedule in EY 2006, last revised on December 15, 2008, to prioritize the forfeiture reclamation work planned for several evaluation years. The schedule was very aggressive, outlining work to be performed at 17 sites on over 30 permit areas. Since then, the MLRP's forfeiture reclamation efforts have closely followed the schedule. As a result, the MLRC released reclamation liability on 21 permits covering 4,335 acres at bond forfeiture sites during the period EY 2006 through EY 2008. Although forfeiture reclamation work was severely hampered by unusually wet weather conditions in both EY 2008 and EY 2009, the MLRC was able to release reclamation liability on 272.0 permanent program acres in EY 2009, accounting for removal of three permanent program permits from Missouri's IU list. Liability was also released on 220.0 acres covered by three interim program permits that were also eliminated from Missouri's IU list. The AFD conducted three joint inspections at forfeiture sites where liability was released this year and in all instances found the reclamation completed by the MLRP warranted liability release.



11

PERMANENT PROGRAM FORFEITED SITES RECLAIMED

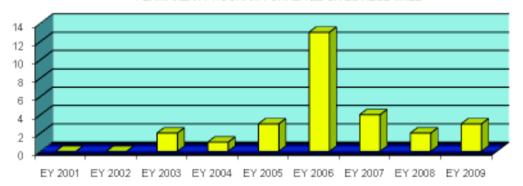


Table 6 of this report exhibits information concerning reclamation at forfeiture sites and surety reclamation sites in EY 2009.

B. <u>Abandoned Mine Land Inventory System (AMLIS) Certification and Data Accuracy</u>

Guided by OSM's Directive AML-1, entitled "Abandoned Mine Land Inventory", and Inspector General's Audit Report No. 2003-I-0074, the AFD conducted an evaluation of the effectiveness of the MLRP in ensuring accuracy of data in the AMLIS. The AFD first reviewed the certified procedures the MLRP AML Program has in place to ensure accuracy. Secondly, to verify accuracy, the AFD reviewed a random sample of Problem Area Descriptions forms with the date of the last update on or after October 1, 2005. OSM concluded that the MLRP's current process and procedures are effective to ensure accuracy of AMLIS data entries.

C. Missouri Abandoned Mine Land Pre-Construction Project Inspections

The purpose of this review was to evaluate the performance of activities and functions relating to project identification and planning as documented by the MLRP AML Program. The scope of the evaluation included a review of program compliance with Missouri's approved Reclamation Plan, and OSM AML Directives and guidelines, where applicable. Site visits to a sample of inventoried problem areas, comprised of unfunded projects combined with project documentation, provided the primary basis for this evaluation. The review included verification of site description, AML problem type/AMLIS key words, proposed scope of work, priority determination, and environmental setting (for National Environmental Policy Act documentation). The AFD found no program deficiencies, but did note that AMLIS data, as a part of project/site documentation, did not fully address on-the-ground conditions at several sites. The state promptly and appropriately updated information in the AMLIS for these sites.

D. <u>Missouri AML Program Administration of Realty Policies and Procedures</u>

This evaluation was conducted to determine if the MLRP AML Program rights of entry, recovery of the cost of reclamation activities on privately owned land, and acquisition of eligible land and water were being executed in accordance with Missouri's approved Reclamation Plan. A representative sample of federally funded reclamation projects for which realty documentation was in the official files was selected for the review. The AFD concluded that the MLRP AML Program's realty actions are in compliance with the approved State Reclamation Plan. However, the MLRP needs to update its State Reclamation Plan and its program procedures manual to reflect the 2006 SMCRA amendments.

APPENDIX 1 - Tabular Summary of Core Data to Characterize the Program

These tables present data pertinent to mining operations and State and Federal regulatory activities within Missouri. They also summarize funding provided by OSM and Missouri staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the same as the evaluation year. Additional data used by OSM in its evaluation of Missouri's performance is available for review in the evaluation files maintained by the MCR office in Alton, Illinois.

When OSM's Directive REG-8, Oversight of State Programs, was revised in December 2006, the reporting period for coal production on Table 1 was changed from a calendar year basis to an evaluation year basis. The change was effective for the 2007 evaluation year. However, with Change Notice REG-8, effective July 1, 2008, the calendar year reporting period in Table 1 for coal produced for sale, transfer or use was reestablished and is effective for the 2009 evaluation year. In addition, for the 2008 evaluation report, coal production for the two prior years reported on Table 1 was recalculated on a calendar year basis so that all three years of production reported in the table are directly comparable. The difference in reporting periods should be noted when attempting to compare coal production figures from annual evaluation reports originating both before and after the December 2006 revision to the reporting period.

TABLE 1 - COAL PRODUCTION

TABLE 2 – INSPECTABLE UNITS

TABLE 3 – STATE PERMITTING ACTIVITY

TABLE 4 – OFF-SITE IMPACTS

TABLE 5 – ANNUAL STATE MINING AND RECLAMATION RESULTS

TABLE 6 – STATE BOND FORFEITURE ACTIVITY

TABLE 7 – MISSOURI STAFFING

TABLE 8 – FUNDS GRANTED TO MISSOURI BY OSM

TABLE 9 – STATE INSPECTION ACTIVITY

TABLE 10 – ENFORCEMENT ACTIVITY

TABLE 11 – LANDS UNSUITABLE ACTIVITY

TABLE 12 – POST-MINING LAND USE ACREAGE

Coal Produced for Sale, Transfer, or Use (Millions of Short Tons)

| Period | Surface Mines | Underground Mines | Total |
|--|------------------|----------------------|-------|
| Coal production ^A for entire State: | | | |
| Calendar Year | | | |
| CY 2006 | 0.240 | 0.000 | 0.240 |
| CY 2007 | 0.236 | 0.000 | 0.236 |
| CY 2008 | 0.262 | 0.000 | 0.262 |

Coal production as shown in this table is the gross tonnage and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported to OSM during the following quarter by each mining company on line 8 (a) of form OSM-1, 'Coal Reclamation Fee Report.' Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.

Provide production information for the latest three full calendar years to include the last full calendar year for which data is available.

| | | | | | | Т | ABL | E 2 | | | | | | |
|---|--|--|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|--|---------------------|-----------|-----------|----------------|--------------|
| Inspectable Units As of June 30, 2009 | | | | | | | | | | | | | | |
| Coal mines | | peractiv Phase II Abandonad Totale Ins | | | | | | Nbr.of | Permitted Acreege ^B (100's of acres) | | | | | |
| facilities | | ative | | ond Base | PERSON | KIRG | 100 | 118 | Unite ^A | | Lands | | Private nda | All Lands |
| | IP | PP | P | PP | IP | PP | IP | PP | | IP | PP | IP | pp | Total |
| LANDS FO |)R WH | ICH TH | IE STA | TE IS T | HE RE | GULA | TORY A | AUTHO | RITY | | | | | |
| Surface mines | 0 | 13 | 0 | 0 | 6 | 16 | 6 | 29 | 21 | 0.0 | 0.0 | 5.0 | 55.5 | 60.5 |
| Underground mines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other facilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | O | 13 | 0 | 0 | 6 | 16 | 6 | 29 | 21 | 0.0 | 0.0 | 5.0 | 55.5 | 60.5 |
| | | | | | | | | | | | | | | |
| Total numb | oer of p | ermits: | | | | | | | | | 3 | 5 | | |
| Average no | umber | of perm | its per | inspect | able ur | nit (excl | luding e | xploration | on sites |): | 1.6 | 7 | | |
| Average no | umber | of acre | s per in | spectal | ble unit | (exclud | ding exp | oloration | sites): | | 288.1 | 0 | | |
| Number of ex | pioration | permits | on State | and priva | ate lands | ž. | 2 | On F | Federal lar | ndis ^C : | 0 | | | |
| Number of ex | pioration | notices | on State | and priva | ate lands | : | 0 | On F | ederal lar | ndis ^C : | 0 | | | |
| | | | | | | | | | | | | | | |
| IP: Initial reg PP: Permane | ulatory p ent regul | rogram s atory pro | ites gram site | 56 | | | | | | | | | | |
| ^A Inspectable programs. | PP: Permañent regulatory program sties A inspectable units include multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs. | | | | | | | | | | | | | |
| ^B When a sin appropriate or | B When a single inspectable unit contains both Federal lands and State/Private lands, enter the permitted acreage for each land type in the appropriate category. Output Description: | | | | | | | | | | | | | |
| ^C Includes or lands program | nly explor n. Exclu | ration act des expir | tyttes re oration re | gulated b gulated b | y the Sta ly the Bu | ite pursua reau of L | ant to a co and Mana | ooperative agement. | e agreeme | ent with CS | M or by O | SM pursua | ant to a Fe | deral |
| | | | | | | | | | | | | | | |

State Permitting Activity As of June 30, 2009

| Type of | | Surfa mine | | U | ndergr mine | ound es | | Othe facilit | | | Tota | ls |
|---|--------------|---------------|-------|--------------|----------------|------------|--------------|-----------------|-------|--------------|--------|-------|
| Application | App. Rec. | lssued | Acres | App. Rec. | Issued | Acres A | App. Rec. | Issued | Acres | App. Rec. | Issued | Acres |
| New Permits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Renewals | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Transfers, sales, and assignments of permit rights | 1 | 1 | | 0 | 0 | | 0 | 0 | | 1 | 1 | |
| Small operator assistance | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Exploration permits | | | | | | | | | | 0 | 0 | |
| Exploration notices | | | | | | | | | | | 0 | |
| Revisions (exclusive of Incidential boundary revisions) | | 11 | | | 0 | | | 0 | | | 11 | |
| Revisions (adding acreage but are not incidental boundary revisions) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Incidental boundary revisions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 1 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 0 |

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions:

⁰

A includes only the number of acres of proposed surface disturbance.

B State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

OFF-SITE IMPACTS (excluding bond forfeiture sites)

| RESO | URCES AFFEC | Ħ | People | | | Land | | | Water | | | Structures | | |
|---------------|----------------|---|--------|----------|-------|-------|----------|-------|-------|----------|-------|------------|----------|-------|
| DEG | REE OF IMPAC | T | Minor | Moderate | Major | Minor | Moderate | Major | Minor | Moderate | Major | Minor | Moderate | Major |
| TYPE OF | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IMPACT AND | Land Stability | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | Hydrology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NUMBER | Encroachment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OF EACH | Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TYPE | Total | 0 | 0 | 0 | 0 | (| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Total number of inspectable units (excluding bond forfeiture sites): 12
Inspectable units free of off-site impacts: 12
Inspectable units with off-site impacts: 0

OFF-SITE IMPACTS ON BOND FORFEITURE SITES

| RESO | URCES AFFEC | 며 | | People | | | Land | | Water | | | Structures | | |
|---------------|----------------|---|-------|----------|-------|-------|----------|-------|-------|----------|-------|------------|----------|-------|
| DEG | REE OF IMPAC | T | Minor | Moderate | Major | Minor | Moderate | Major | Minor | Moderate | Major | Minor | Moderate | Major |
| TYPE OF | Blasting | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IMPACT AND | Land Stability | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | Hydrology | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | Encroachment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OF EACH | Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TYPE | Total | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

Total number of inspectable units (only bond forfeiture sites):

Inspectable units free of off-site impacts:

Inspectable units with off-site impacts:

| - | Annual State Mining and Reclama | ation Resu | Its | | | | | |
|------------------|--|---------------------------|---|--|--|--|--|--|
| Bond | SCALARIA MARKADA REPUBLICA SERVICIA PER PER PER ANTA MARKAT DE | During | During this Evaluation Year | | | | | |
| release phase | Applicable performance standard | Total acreage released | Acreage also released under Phase I | Acreage also released under Phase II | | | | |
| Α | В | С | D | E | | | | |
| Phase | Approximate original contour restored Topsoli or approved alternative replaced | 106 | | | | | | |
| Phase II | - Surface stability - Establishment of vegetation | 153 | 0 | 1 | | | | |
| Phase III | Post-mining land use/productivity restored Successful permanent vegetation Groundwater recharge, quality and quantity restored Surface water quality and quantity restored | 263 | 106 | 153 | | | | |
| | Bonded Acreage A | | Acres o | Acres during this evaluation year | | | | |
| Total nu | mber of new acres bonded during this evaluation year | | | 0 | | | | |
| Number | of acres bonded during this evaluation year that are considered remining, if | avallable | | 0 | | | | |
| Number | of acres where bond was forfelted during this evaluation year | | 5 | 0 | | | | |
| | Bonded Acreage Status | C | umulative Ac | res | | | | |
| Total nu | mber of acres bonded as of the end of last review period (June 30, 2008) B | | 4,510 |) | | | | |
| | mber of acres bonded as of the end of this review period (June 30, 2009) B | | 4,24 | 7 | | | | |
| | acres bonded that are between Phase I bond release and Phase II bond as of June 30, 2009 ^B | | 70 | 3 | | | | |
| Sum of a | acres bonded that are between Phase II bond release and Phase III bond as of June 30, 2009 ^B | | 8 | 3 | | | | |
| | Disturbed Acreage | | Acres | | | | | |
| Number | of Acres Disturbed during this evaluation year | | (1) | D | | | | |
| Number | of Acres Disturbed at the end of the | | 5 | 0 | | | | |

Brief explanation of columns D & E. The States will enter the total acreage under each of the three phases (column C). The additional columns (D & E & E) will "break-out" the acreage among Phase II and/or Phase III. Bond release under Phase II can be a combination of Phase I and II acreage, and Phase III acreage can be a combination of Phase I, II, and III. See "instructions for Completion of Specific Tables," Table 5 for example.

| _ | Α. | _ | | _ | _ |
|---|----|---|---|---|-----|
| | _ | | | | 100 |
| | _ | _ | _ | _ | u |

State Bond Forfeiture Activity (Permanent Program Permits)

| (· | , | | |
|--|--------------------|-------------|-------|
| Bond Forfeiture Reclamation Activity by SRA | Number of Sites | Dollars | Acres |
| Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2008 (end of previous evaluation year) A | 15 | | 1,575 |
| Sites with bonds forfeited and collected during Evaluation Year 2009 current evaluation year) | 0 | \$ 0 | 0 |
| Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2009 (current evaluation year) | 0 | | 0 |
| Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2009 (current evaluation year) | 3 | | 272 |
| Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2009 (end of current evaluation year) ^A | 12 | | 1,303 |
| Sites with bonds forfeited but uncollected as of June 30, 2009 (end of current evaluation year) | 3 | | 1,213 |
| Surety/Other Reclamation (In Lieu of Forfeiture) | | | |
| Sites being reclaimed by surety/other party as of June 30, 2008 (end of previous evauation year) ^B | 1 | | 371 |
| Sites where surety/other party agreed to do reclamation during Evaluation Year 2009 (current evaluation year) | 0 | | 0 |
| Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2009 (current evaluation year) | 0 | | 0 |
| Sites with reclamation completed by surety/other party during Evaluation Year 2009 (current evaluation year) ^C | 0 | | 0 |
| Sites being reclaimed by surety/other party as of June 30, 2009 (current evaluation year) B | 1 | | 371 |
| | | | |

Includes data only for those forfeiture sites not fully reclaimed as of this date

Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date

This number also is reported in Table 5 as Phase III bond release has been granted on these sites

State Staffing

(Full-time equivalents at end of evaluation year)

| Function | EY 2009 |
|---|---------|
| Regulatory Program | |
| Permit Review | 1.60 |
| Inspection | 2.05 |
| Other (administrative, fiscal, personnel, etc.) | 1.10 |
| Regulatory Program Total | 4.75 |
| AML Program Total | 8.25 |
| Total | 13.00 |

Funds Granted To Missouri By OSM

(During the Current Evaluation Year)
(Actual Dollars, Rounded to the Nearest Dollar)

| Type of Funding | Du | Funds Awarded ring Current luation Year | Federal Funding as a Percentage of Total Program Costs |
|---|----|---|--|
| Regulatory Funding | | | |
| Administration and Enforcement Grant | \$ | 223,650 | 50.00 % |
| Other Regulatory Funding, if applicable | \$ | 0 | 0.00 % |
| Subtotal | \$ | 223,650 | |
| Small Operator Assistance Program | \$ | 0 | 100 % |
| Abandoned Mine Land Reclamation Funding A | \$ | 1,830,731 | 100 % |
| Totals | \$ | 2,054,381 | |

 $^{^{\}mathsf{A}}$ includes funding for AML Grants, the Clean Streams initiative and the Watershed Cooperative Agreement Program.

Missouri EY 2009, ending June 30, 2009

| TABLE 9 | | | | |
|--|---------------------------------|---------|--|--|
| State Inspection Activity During Current Evaluation Year | | | | |
| Inspectable Unit Status | Number of Inspections Conducted | | | |
| | Complete | Partial | | |
| Active A | 47 | 70 | | |
| Inactive A | 0 | 0 | | |
| Abandoned A | 13 | 0 | | |
| Total | 60 | 70 | | |
| Exploration | 0 | 0 | | |
| A Use terms as defined by the approved State program. | | | | |

Missouri EY 2009, ending June 30, 2009

TABLE 10 State Enforcement Activity **During Current Evaluation Year** Number of Number of Type of Enforcement Action Actions A Violations A Notice of Violation 0 0 Failure-to-Abate Cessation Order 0 0 Imminent Harm Cessation Order 0 0 Do not include those violations that were vacated.

Missouri EY 2009, ending June 30, 2009

| TABLE 11 | | | | |
|---|--------|---------|--|--|
| Lands Unsuitable Activity | | | | |
| During Current Evaluation Year | | | | |
| | Number | Acreage | | |
| Number Petitions Received | 0 | | | |
| Number Petitions Accepted | 0 | | | |
| Number Petitions Rejected | 0 | | | |
| Number Decisions Declaring Lands Unsuitable | 0 | 0 | | |
| Number Decisions Denying Lands Unsuitable | 0 | 0 | | |

TABLE 12 Optional

Post Mining Land Use Acreage (after Phase III bond release)

| Land Use | Acreage Released during this Evaluation Year | |
|---|--|--|
| Cropland | | |
| Pasture/Hayland | 106 | |
| Grazing Land | 0 | |
| Forest | 0 | |
| Residential | 0 | |
| Fish & Wildlife Habitat | 109 | |
| Developed Water Resources | 0 | |
| Public Utilities | 0 | |
| Industrial/Commercial | 0 | |
| Recreation | 0 | |
| Other (please specify): Prime Farmland | 11 | |
| Other (please specify): | D | |
| Other (please specify): | 0 | |
| Total | 263 | |

APPENDIX 2 – State Comments on the Report

From: Mike Larsen [mike.larsen@dnr.mo.gov]

Sent: Friday, July 31, 2009 4:58 PM

To: Gilmore, Andrew R.

Cc: Pursell, Perry; Mike Mueller

Subject: Missouri's Annual Evaluation Summary Report - EY 2009

Andy, I received your draft evaluation report for Missouri. Both Mike Mueller and myself reviewed the report and can find no errors nor do we have any comments. We both appreciate the effort put into the report on the part of OSM.

Go ahead and finalize then send us a few copies if you would please.

Thanks.

Mike.

Mike Larsen, R.G. Staff Director, Land Reclamation Program Missouri Department of Natural Resources (573) 751-4041 mike.larsen@dnr.mo.gov

Disposition of Comments

Changes were not required.